



Construction Statistics

Introduction

Federal censuses and surveys gather detailed information on a wide variety of construction subjects. There are annual statistics available on housing starts in the United States for each year, beginning with 1889, and on the value of construction put in place since 1915. Monthly data on the number of residential housing units authorized by building permits have been published since 1945.

The U.S. Census Bureau collected statistics on companies in the construction industry for 1929, 1935, and 1939 (published as business census reports), and in the quinquennial census of construction industries starting in 1967. Since 1959, when the U.S. Census Bureau assumed responsibility for the current-construction survey programs, a number of surveys have been expanded and new ones introduced, including the Survey of Manufactured Housing, which is sponsored by and published jointly with the U.S. Department of Housing and Urban Development (HUD).

Title 13, United States Code-Census, the basic statute under which the U.S. Census Bureau operates, authorizes the collection of construction data. According to this law, compliance with the economic census is mandatory, but response to the surveys is voluntary. In all cases, the law strictly protects the

confidentiality of the information the U.S. Census Bureau collects about individual firms and construction projects and prescribes heavy penalties for disclosure.

Who Uses Construction Data

Federal, state, and local administrators and planners concerned with the Nation's residential and nonresidential building, employment, transportation, and natural resources (lumber, water, fuels, minerals, etc.) use construction data. Contractors, bankers, manufacturers, wholesalers, retailers, trade associations, chambers of commerce, and utility companies are but a few of the business users. Researchers in such fields as ecology, architecture, fire science, urban planning, and economics consult these statistics. Newspapers, magazines, textbooks, and radio and television programs dealing with economic events spotlight, for the general public, conditions or trends revealed in the census or survey data. Anyone can access the published data.

What Data Are Available

As distinguished from the census, which includes construction industries, the surveys (most published under the general title of Current Construction Reports) relate to all construction activities regardless of who performs the work. Unlike the other economic programs,

the current surveys in the construction sector are not integrated with the census. The reports and sampling frames for these surveys are based on detailed records, such as building permits.

The following are highlights of the publications associated with the U.S. Census Bureau's construction surveys:

- *Housing Starts (C20)*. A monthly report of statistics for the United States and census regions on the number of new privately-owned housing units started. The report includes both actual and seasonally adjusted estimates for units started, units authorized in permit-issuing areas, and units authorized but not started by number of housing units in structure. Comparative data are shown for earlier years.
- *Housing Completions (C22)*. Provides monthly statistics on the number of new privately owned housing units completed and under construction for United States and regions. The report includes both actual and seasonally adjusted estimates for units completed and under construction by number of housing units in structure. Comparative data are shown for earlier years. Quarterly statistics on characteristics of new housing appear in selected issues. The publication is a joint report of the U.S. Census Bureau and HUD.

- *New Home Sales/Characteristics of New Housing (C25)*. Presents information on new, privately owned, one-family houses sold during the month and for sale at the end of the month, together with related annual data and figures for prior months for the United States and regions. The report also shows some comparative data for earlier years. Tables present seasonally adjusted and unadjusted data on new one-family houses sold and for sale, months' supply at the current sales rate, and median number of months on the sales market, measured from month of start. Tables show average and median sales prices, as well as houses sold and for sale by stage of construction, and quarterly figures on houses sold by type of financing. Annual reports show detailed characteristics of single- and multifamily structures.
- *Manufactured Housing*. Reports from this survey, conducted by the U.S. Census Bureau and sponsored by HUD, present monthly regional estimates of manufactured homes placements, average sales prices, and dealers' inventories and more detailed quarterly and annual estimates including selected characteristics of new manufactured homes. Data on shipments of manufactured homes are produced by the National Conference of States on Building Codes and Standards and published by the Manufactured Housing Institute.
- *Value of Construction Put in Place (C30)*. Presents estimates for the United States of the value of total construction put in place by type of construction (residential, nonresidential, public utility, public buildings, and the like) and by type of owner (private, state or local, or Federal

government). Seasonally adjusted annual rates in current and constant dollars and some comparative data for earlier years also are shown. Supplements provide data on annual private nonresidential construction by geographic region and division.

- *Building Permits*. Information available online provides data on the number of new privately-owned housing units authorized by building permits. The data relate to new housing units intended for occupancy on a house-keeping basis. They exclude manufactured (mobile) homes, hotels, motels, and other group residential structures, such as nursing homes and college dormitories. Data are collected monthly and annually. The monthly statistics are based on a sample of about 8,500 permit offices. Annual statistics are collected from all permit offices, totaling approximately 19,000 places.
- *Residential Improvements (C50)*. This series features estimates of expenditures by property owners for repairs, additions, alterations, and major replacements to residential properties during the current quarter and for specified preceding quarters, with some comparative data for earlier years for the United States and regions. Estimates are both unadjusted and seasonally adjusted annual rates. Expenditures are provided separately for one-unit owner occupied properties. More detailed data are available on expenditures by year built, region, and payments to contractors versus "do-it-yourself work," for owner-occupied one-unit residential properties. Since 1988, the fourth quarter report has included annual data on expenditures by detailed job categories and size of property.

Censuses

The economic census, which occurs for years ending in "2" and "7," enumerates all business establishments in the United States and Outlying Areas (Puerto Rico, Guam, the Virgin Islands of the United States, and the Commonwealth of the Northern Mariana Islands) that are engaged in construction activities as defined by the North American Industry Classification System (NAICS).

The 1997 Economic Census saw the introduction of the North American Industry Classification System (NAICS), which replaced the Standard Industrial Classification (SIC) code used by the U.S. Census Bureau since the 1940s. The NAICS assigned classification based on the primary activity of an establishment and uses a production-oriented concept. The U.S. Census Bureau used the NAICS for the 1997 Economic Census; except for the Outlying Areas, which used the SIC coding system. Construction industries are identified as NAICS sector 23, which is comprised of establishments primarily engaged in the construction of buildings and other structures, heavy construction (except buildings), additions, alterations, reconstruction, installation, and maintenance and repairs. Establishments engaged in demolition or wrecking of buildings and other structures, clearing of building sites, and sale of materials from demolished structures also are included. This sector also includes those establishments engaged in blasting, test drilling, landfill, leveling, earthmoving, excavating, land drainage, and other land preparation. An example of the NAICS code for the construction industries; would be Structural Steel Erection Contractors, whose NAICS code is 23591.

Data collected in the census cover only establishments with employees and include employment (construction worker and other), payroll, value of construction work, cost of materials, supplies and fuels, cost of work subcontracted out, capital expenditures, assets, kind of business, and type of construction. Data for the employers were obtained in the census by a survey that included medium size and large employers and a sample of the smaller ones.

Data collected in the 1997 Economic Census are published in several nationwide, economy-wide reports between 1999 and 2001. The reports are as follows:

- *Core Business Statistics*

- *Advance Report.* This report contains the first data ever published on a NAICS basis and contains national data at the sector and subsector levels. The NAICS table was limited to 1997 data, but a separate, Standard Industrial Classification (SIC) code-based table shows 1992 and 1997 figures at the two-digit SIC level to permit calculation of percentage change in sales or employment over the 5-year period.
- *Comparative Statistics.* This report supersedes the *Advance Report*. It presents two-, three-, and four-digit SIC statistics at the state and U.S. level.
- *Bridge Between NAICS and SIC.* The *Bridge Between NAICS and SIC* presents 1997 data cross-tabulated by the old and new classification systems identifying the lowest common denominator between the two systems.

- *Nonemployer Statistics.* This report summarized the number of establishments and sales and receipts of companies with no paid employees.

- *Company Statistics.* Data compiled from the 1997 industry-wide programs were released as part of the *Company Statistics Series*. This series of seven reports included—*Company Summary, Women, Black, Hispanic, Asian and Pacific Islander, American Indian and Alaska Native, and Summary*. Each of these reports includes data by industrial classification and/or geographic areas (states, metropolitan areas, counties, and places), size of firm (employment and receipts), and legal form of organization (individual proprietorships, partnerships, and corporations).

An eighth report, *Business Expenses*, shows operating expenses data at the national level for SIC-based merchant wholesale trade, retail trade, service industries, communications industries, transportation and warehousing, and travel industries. In addition, NAICS-based data are presented for manufactures, mineral industries, and construction industries.

The following data from the 1997 Economic Census for the Construction sector were published for the Nation, each state, and the District of Columbia:

- *Industry Series.* There were 28 separate industry reports published that present data at the six-digit NAICS levels. These reports include statistics, such as number of establishments, employment, payroll,

value added, cost of materials, value of business done, type of construction, and capital expenditures, as well as selected statistics for states.

- *Geographic Area Series.* Separate reports were published for each state, the District of Columbia, and the United States as a whole. These reports present statistics similar to the industry reports for each state and selected six-digit NAICS-level data.

- *Subject Series*

- *Industry Summary.* This report shows data for the Nation as a whole at two- and three-digit NAICS levels. It presents statistics similar to the industry reports. It also presents information by legal form of organization and by types of organization.
- *Geographic Area Summary.* This report presents statistics similar to the individual geographic area series reports for the Nation as a whole and region, and as well as selected state level data.
- *1997 Economic Census of the Outlying Areas: Construction, Manufacturing, Wholesale, Retail, and Service Industries.*
- *Puerto Rico.* The construction report presents summary, industry, and geographic area statistics. The industry chapter presents 1997 data for industries on the number of construction establishments; value of construction work; employment;

proprietors and partners working; payroll; hours worked; payments to subcontractors; payments for materials, components, and supplies; payments for power, fuels, and lubricants; payments for rental of machinery, equipment, and structures; value added; and capital expenditures during the year. Selected data are shown for selected industries by geographic location of establishments and by legal form of organization. Data also are provided for establishments by employment size.

- *Virgin Islands of the United States.* This report presents data by kind of business for construction industries, manufactures, retail trade, wholesale trade, and service industries. In addition to data for the Virgin Islands as a whole, data are presented for St. Thomas and St. John (combined to prevent disclosure problems), St. Croix and the towns of Charlotte Amalie, Christiansted, and Frederiksted.
- *Guam.* This report presents data by kind of business for construction industries, manufacturing, retail trade, wholesale trade, and service industries. Tables present data for Guam and its election districts.
- *Northern Mariana Islands.* This report presents data by kind of business for construction industries, manufacturing, retail trade, wholesale trade, and service industries. Tables present data for the Northern Mariana Islands and the four municipalities.

Other Economic and Demographic Census and Survey Reports

- *County Business Patterns.* This is an annual series that covers most of the Nation's economic activity. Data are provided in the following NAICS economic sectors: forestry, fishing, hunting, and agriculture support; mining; utilities; construction; manufacturing; wholesale trade; retail trade; transportation and warehousing; information; finance and insurance; real estate and rental and leasing professional, scientific, and technical services; management of companies and enterprises; administrative and support and waste management and remediation services; education services; health care and social assistance; arts, entertainment, and recreation; accommodation and food services; and other services (except public administration). The series is useful for studying the economic activity of small areas; analyzing economic changes over time; and as a benchmark for statistical series, surveys, and databases between economic censuses. The series serves various business uses, such as analyzing market potential, measuring the effectiveness of sales and advertising programs, setting sales quotas, and developing budgets. The data also are used by government agencies for administration and planning.
- *Current Industrial Reports series (CIRs).* This series presents special tabulations that are useful to

the construction trades, including reports on—lumber and wood products, clay and glass products, construction machinery, and a variety of other construction-related products.

- *American Housing Survey.* The American Housing Survey collects data on the Nation's housing, including apartments, single-family homes, manufactured homes, vacant housing units, household characteristics, income, housing and neighborhood quality, housing costs, equipment and fuels, size of housing unit, and recent movers. National data are collected every other year, and data for each of 46 selected Metropolitan Areas are collected approximately every 4 years, with an average of 12 MSAs included each year. The national sample covers on average 55,000 homes. Each MSA's sample covers approximately 4,000 homes. The survey is conducted by the U.S. Census Bureau for the U.S. Department of Housing and Urban Development.
- The decennial censuses of population and housing publish housing characteristics for states, counties, cities, and smaller areas, down to the level of city blocks. A number of publications from Census 2000 will present population, housing, social, and economic characteristics for various geographic levels.

Other Aids and Sources of Data

- More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys are published in the *Guide to the 1997 Economic Census and Related Statistics* (<http://www.census.gov/epcd/www/guide.html>); *The Statistical Abstract of the United States*; the periodic *County and City Data Book* (latest, 1994), *State and Metropolitan Area Data Book* (latest, 1998), *Historical Statistics of the United States from Colonial Times to 1970* (available from the Government Printing Office, out-of-print commercially), and *County and State Profiles* (latest, 1997). Census and survey data also appear in trade journals, textbooks, and other secondary sources. Additional information on the methodology, procedures, and history of the economic censuses will be published in the *History of the 1997 Economic Census* (<http://www.census.gov/econ/www/history.html>).
- Information on construction industries appears in digest form in reports from the economic census and surveys and are available from more than 1,400 Government and Census depository libraries across the country. These depositories consist primarily of college and university libraries. Many smaller libraries also maintain collections of census publications.
- Business and Industry Data Centers (BIDCs) are the result of a U.S. Census Bureau pilot project launched in 1988. The U.S. Census

Bureau and other Federal agencies furnish economic data and related assistance and training to aid a number of BIDCs in furthering economic development in their states. The Indiana BIDC specializes in constructions statistics and can be reached at—

Indiana Business
Research Center
801 West Michigan
Indianapolis, IN 46202-5151
Telephone: 317-274-2205
Fax: 317-274-3968

- All of the states, plus the District of Columbia, Puerto Rico, Guam, and the U.S. Virgin Islands of the United States have Census State Data Centers that assist the public with printed and electronic census data. Additionally, some states also have business and industry data centers, which specialize in economic data.
- A network of Regional Data Centers (RDCs) and the Suitland, MD, research facility offer qualified researchers restricted access, in secure environments, to data collected by the U.S. Census Bureau's surveys and censuses that are not included within the agency's publication program. Researchers must submit research proposals to the RDCs and the U.S. Census Bureau for review and approval. Upon approval, researchers are subject to the confidentiality restrictions of Title 13, United States Code—Census.

How the Data Are Published

Economic Census

Most of the economic census Construction sector statistics are issued

on CD-ROM and online through the U.S. Census Bureau's American Factfinder and in PDF format at <http://www.census.gov>. Printed products may be ordered by mail, telephone, and the Internet from—

Superintendent of Documents
U.S. Government Printing
Office
P.O. Box 371954
Pittsburgh, PA 15250-7954
Telephone: 202-512-1800
Fax: 202-512-2250
<http://www.gpo.gov>

Electronic products may be purchased by mail from—

U.S. Department of Commerce
U.S. Census Bureau (MS1921)
P.O. Box 277943
Atlanta, GA 30384-7943

Electronic products may be ordered by telephone or fax from—

Administrative and Customer
Services Division
Customer Services Branch
U.S. Census Bureau
Washington, DC 20233
Telephone: 301-457-4100
Fax: 888-249-7295 or
301-457-3842

Customer Services can print and bind any PDF report on demand, priced at \$25 or more per report, depending upon the number of pages. (A list of reports, with page counts, is available via the U.S. Census Bureau's Internet site (<http://www.census.gov>), in the Economic Census section of the *Catalog: Publications*.)

Current Surveys

Most of the data from the Current Construction Surveys are available online from our Web site at <http://www.census.gov/const/www/index.html>. Printed reports are available in PDF format on the web, and can be purchased from the Superintendent of Documents at the same address as economic census reports.

Electronic products for the *Manufactured Housing*, *Value of Construction Put in Place*, and *Residential Improvements* reports can be obtained by calling 301-457-1605. Electronic products for *Building Permits*, *Housing Starts*, *Housing Completions*, and *New Home Sales/Characteristics of New Housing* reports can be obtained by calling 301-457-1321.

Factfinder for the Nation

General information about the U.S. Census Bureau's various statistical programs are contained in the publications of the *Factfinder for the Nation*. Inquiries and suggestions about U.S. Census Bureau activities are invited. Write to—

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